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January 24, 1986

Mr. Lowell P. Braxton
Administrator, Mineral Resource Development
and Reclamation Program
Division of Oil, Gas and Mining
Utah Department of Natural resources
365 West North Temple
Three Triad Center, Suite 350
Salt Lake City, Utah 84180

ACT/035/002

SUBJECT: Utah Copper Division Modernization Project

Dear Mr. Braxton:

Enclosed is Kennecott's response to your completeness letter of January 21, 1986 regarding the modernization of our Utah Copper Division. Please advise Mr. Al Trbovich (801/322-8263) as soon as possible if you require additional information or clarification to complete the Phase I permitting process.

Very truly yours,

R. A. Malone

/mf

cc: K. May, w/enc.
V. R. Rao, w/enc.
A. M. Trbovich, w/enc.
J. B. Winter, w/enc.

RESPONSE TO COMPLETENESS REVIEW

Letter of January 21, 1986

Utah Copper Division Modernization Project

Rule M-3(1)(g) - JSL

Comment: The operator has not completely addressed this section. As per discussions held in our office with Kennecott representatives on December 13, 1985, the use of the Soil Conservation Service Survey map would be adequate to delineate the soil resources of the Grinding/ Milling Facility site and the proposed access road.

Response: The requested map is attached.

Rule M-10(14) - JSL

Comment: Based on the January 7, 1986 soils submittal and subsequent onsite field visit (January 13, 1986) topsoil evaluation, the Division recommends that the following soil removal plan be implemented into the UCD, Phase I application:

(a) All potential disturbance areas west of survey point E 17500 (refer to drawing 712-C-120) must have a total of six inches of topsoil removal.

(b) All potential disturbance areas east of point E 17500 must have a total topsoil removal depth of twelve inches. It would be beneficial for the operator to "split" this area, delineate such on a soil survey map, and create a soil mass balance in relation to each area.

(c) To adequately address Rule M-101(14), the operator must develop and formally submit a detailed topsoil management plan for the area(s) to be disturbed. The plan must include a narrative description of the proposed topsoil removal, storage and redistribution procedures to be undertaken for each "split area".

Response: A volume of 14,000 cubic yards of the upper horizon soil will be removed from the plant site and stored for post-construction reclamation. The soil will be scraped from the site after grubbing and clearing has occurred and will be stored in a stockpile east of the site. Precipitation runoff will be diverted around the stockpile and a silt control fence will be constructed to prevent the escape of fine particulate matter from the stockpile. Upon completion of construction, the stored soil will be placed on the remaining exposed ground (i.e., road embankments, plant site slopes). A one foot layer will be placed. This soil will be the support medium for the post-construction planting.

Following construction, Kennecott will establish a test program to determine techniques for best reclaiming the second horizon soil to a vegetative support level equivalent to the nearby undeveloped areas. The information collected by the test program will be used, along with other appropriate input, to determine the final reclamation procedures following permanent closure of Kennecott's operation.

Rule M-s(2) - LK

Comment: The operator should add two lbs/acre PLS of yellow sweet clover to the post-construction seed mix. While the seed mix is adequate for post-construction seeding, it is not acceptable for final revegetation in that it lacks forbs and and shrubs. At least three-fourth species of each form should be added to the final reclamation seed mix.

The operator has not described seeing methodology, the use of mulch, etc., as previously requested by the Division

Response: Two pounds per acre PLS of yellow sweet clover will be added to the post-construction seed mixture. Where possible, planting will be performed by drill seeding. Where slope angles make drill seeding impractical, broadcast seeding will be performed.

Kennecott agrees that forbs and shrubs are appropriate in the seed mixture for final revegetation. However, determination of the specific species to be included in the mixture should be reserved and incorporated into the plot study being conducted under Rule M-10(14).

Rule M-3(2)(a)(b)(c)(e)(f) - JSL, PGL & LK

Comment: A reclamation plan and reclamation time take must be submitted as previously requested. The anticipated time for each major task in the reclamation process has not been disclosed.

Response: Post-construction reclamation will take place during the first autumn following the completion of construction. The reclamation will include placing stored upper horizon soil to a depth of one foot on all exposed ground remaining after the site is developed. Some of the steeper embankments may receive less than one foot of soil, if stability is limited. Soil placement will occur in September and early October. Seeding will be performed in late October.

The final reclamation plan involves returning the site to native vegetation, or the equivalent. Following permanent closure of the Kennecott facilities, usable equipment will be salvaged and sold. The time necessary to complete this process is very difficult to forecast but cause of the highly variable used equipment market. Two years are estimated. Following sale of salvageable equipment, the surface structures at the site will be razed. Whenever possible, salvageable material will be sold as scrap for recycle. Otherwise, the material and debris will be removed to an approved solid waste landfill. This step is expected to require two years. After razing, foundations will be broken apart, removed and/or buried. Parking and driving surface

will be removed. The site will then be regraded. This step is expected to require one year. During the first October following the completion of regrading, the site will be planted. The planting techniques and methodology will be based on the study cited under Rule M-10(14).

Rule M-10(7) - JSL & PGL

Comment: The operator states in the December 20, 1985 submittal that "after the three-year construction program is completed, all roads not required for operations will be graded and planted." The (Phase I) roads to be maintained and the roads to be reclaimed should be identified and outlined on the appropriate maps and in the narrative of the application for amendment of the mining and reclamation plan.

Response: The plant access road described on previously submitted drawings 712-C-101, 740-C-101, 740-C-102, 740-C-103, 740-C-104, 740-C-105 will serve as the principal access road to the plant during operations and will be maintained. The construction roads parallel to the ore conveyor, ore slurry pipeline and return water pipeline (Phase II) will be used as maintenance roads during operations and will be maintained. No other construction roads are contemplated.

Rule M-5 - PGL

Comment: The detailed reclamation cost estimate must be submitted. A breakdown of the cost per acre and the references used for costs must be given. The reclamation cost represents a third party cost to do the approved reclamation work. The bond will need to be posted prior to any work commencing in Phase I.

Response: The cost estimate is provided in Table 1.

Rule M-10(9) - PGL

Comment: Please state which type of surety will be posted. It is understood that the Phase I proposal does not include any structures, therefore, structural removal need not be included in the reclamation cost estimate.

Response: The surity will be a bond (MR Form 5).

Rule M-10(1) and M-3(2)(a)(b) - PGL

Comment: The operator has stated that there may be a number of different postmining land use options to choose from upon termination of mining operations. For Phase I permitting purposes, the postmining land use must be specified and it must tie directly to the appropriate reclamation/revegetation plan.

The postmining land use and corresponding reclamation plan must be approved by the Division as both will be used in determining the

reclamation bond for the Phase I project. Kennecott must select one postmining land use for Phase I and prepare a reclamation plan which will achieve that objective.

It should be understood, that the operator may submit an application to the Division to amend the approved postmining land use any time in the future. If the alternative land use is justified and approvable, the existing reclamation plan and bond can be adjusted accordingly at that time.

Response: The postmining plan is to return the site to native vegetation.

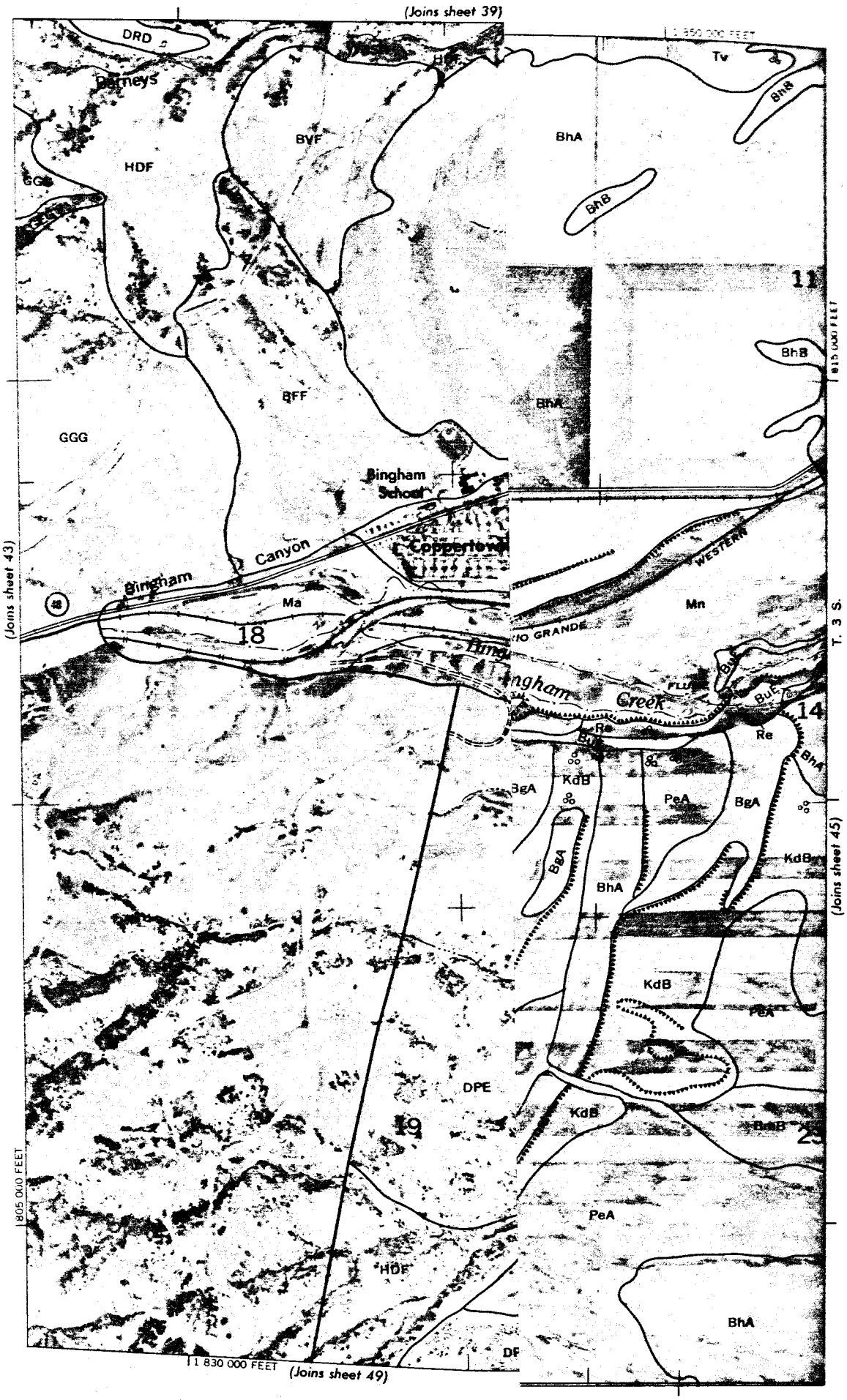
TABLE I

Phase I Site Reclamation Estimate For Bond Estimate

Item	Cost per acre
Final Site Preparation (Dozer) $800/day x 1 day/20 acres	$ 40.00
Seed Mix 20.5 PLS/acre x $2.10/PLS	$ 43.05
Fertilizer 250 pounds/acre x $0.1152/pond	$ 28.80
Equipmental Rental (Tractor and Drill) $300/day x 1 day/20 acres	$ 15.00
Fuel	$ 0.50
Equipment Service and Maintenance	$ 1.00
Manpower $150/day x 1 day/20 acres	$ 7.50
Subtotal	$135.80
Contingency (10%)	$ 13.59
Total	$149.39

**Note: Cost based on broadcast seeding. Actual cost will be less because most seeding will be done by drill, reducing the quantity of seed required.

*Note: Manpower cost is based on actual Kennecott costs, including salary, benefits and supervision. All other costs were quoted to Kennecott by local suppliers.



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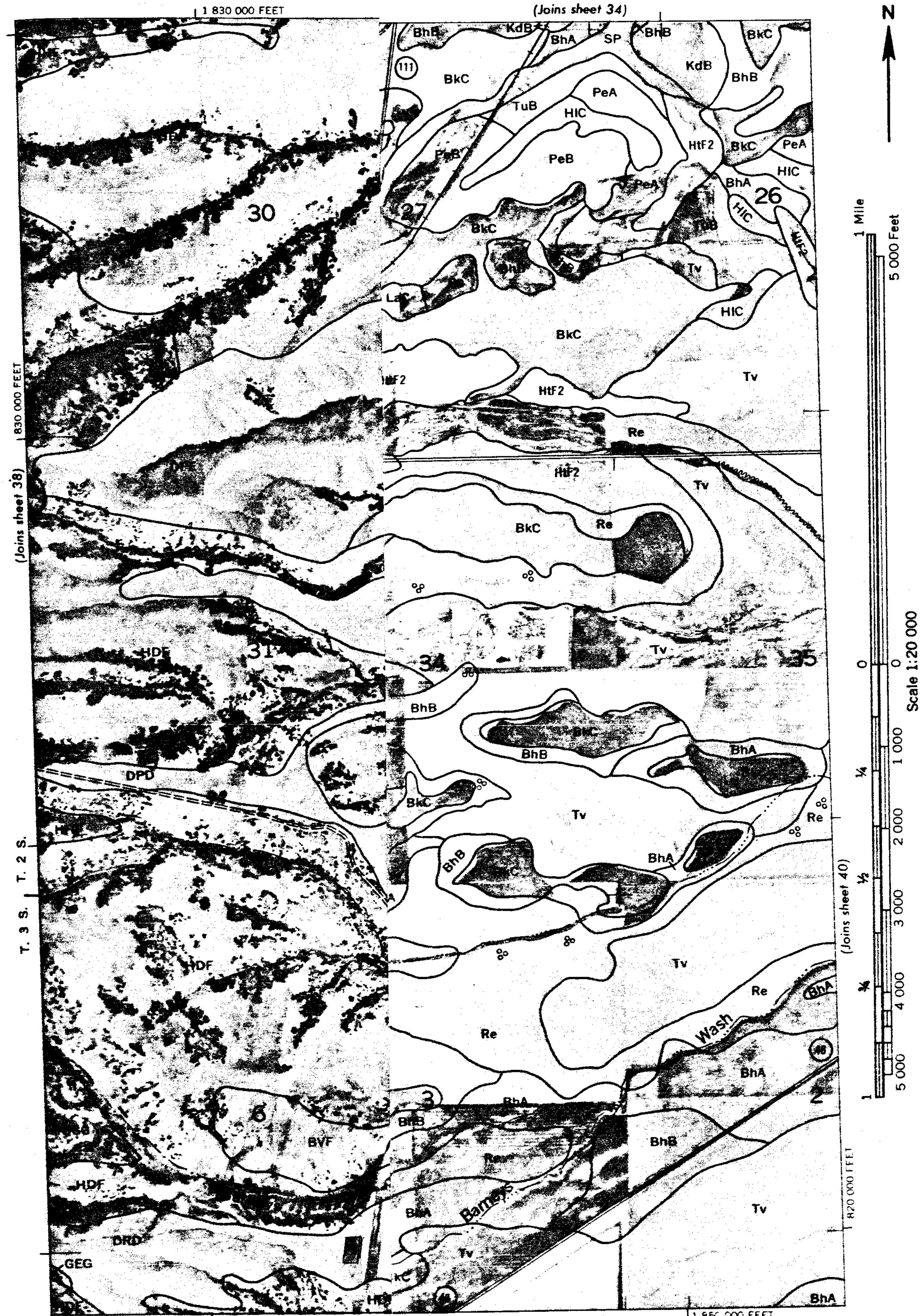
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